

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN

ACANTHA LLC,

Plaintiff,

v.

Case No. 15-C-1257

DEPUY SYNTHES SALES INC. and
DEPUY SYNTHES PRODUCTS INC.,

Defendants.

DECISION AND ORDER

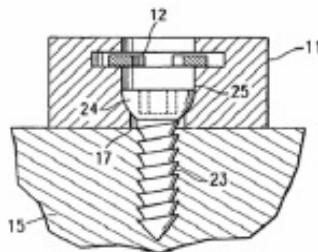
Plaintiff Acantha LLC brought this suit in 2015 against Defendants DePuy Synthes Sales Inc. and DePuy Synthes Products Inc., alleging Defendants' Vectra and Zero-P VA products infringe various claims of its patent, U.S. Reissued Patent No. RE43,008 (the '008 Patent). After a seven day trial, the jury returned a verdict finding that Defendants' products infringe the '008 Patent. The jury did not specify whether it found literal infringement or infringement under the doctrine of equivalents. In addition, the jury found that the infringement was willful and awarded damages in the amount of \$8,248,560.00.

During the trial, Defendants filed a timely motion for judgment as a matter of law under Federal Rule of Civil Procedure 50(a), asserting that they do not infringe any of the asserted claims of the '008 Patent and that the Campbell '089 Patent is prior art. The court took those motions under advisement. Defendants now renew their motion for judgment as a matter of law pursuant to Rule 50(b) and move to amend the judgment pursuant to Rule 59(e). Acantha, for its part, moves

for enhanced damages and other post-trial legal and equitable relief pursuant to Rule 59. For the following reasons, both motions are partially granted.

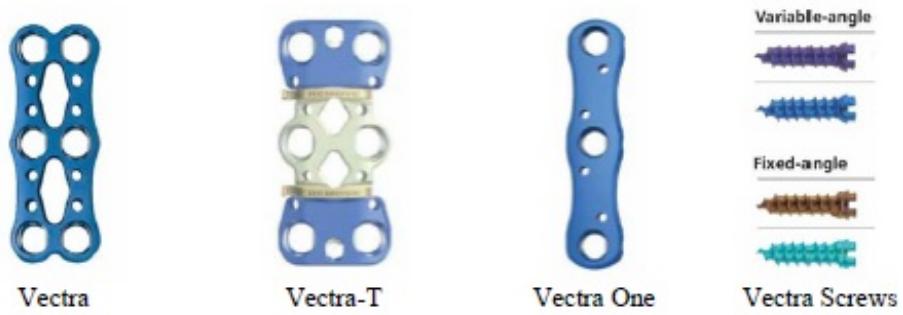
BACKGROUND

Acantha is the owner of U.S. Patent No. 6,261,291, which was issued on July 17, 2001. That patent was later reissued as U.S. Patent No. RE43,008 on December 6, 2011. The ‘008 Patent, entitled “Orthopedic Implant Assembly,” describes an orthopedic implant used for joining bone segments, for instance, in the treatment of broken bones, spinal disorders, or the fusion of vertebrae following the removal of a spinal disk. Acantha asserts claims 3, 9, 21, 36, 37, 59, 63, 72, 79, and 85 of the ‘008 Patent. The asserted claims are directed to an orthopedic implant that includes a stabilizing member (such as a bone plate) with at least one hole through the plate, a securing member (such as a bone screw), and a stopping member (such as a snap-ring or integral collar) that sits in a groove in the bore and prevents the screw from backing out of the assembly, as shown below:



‘008 Patent at 2, Dkt. No. 1-3. As the screw is turned and recedes into the bore, its head expands the snap-ring into the groove. Once the head of the screw passes through the snap-ring, the snap-ring elastically returns to its original shape. The snap-ring then prevents the screw from backing out of the assembly. This orthopedic implant assembly can be durably attached to a patient’s bone and prevents a screw from loosening or backing out of the bone.

Acantha claims Defendants' Vectra and Zero-P VA products infringe. The Vectra line consists of three different anterior cervical plating products: Vectra, Vectra-T, and Vectra-One. These products can be distinguished by their anterior cervical plates.



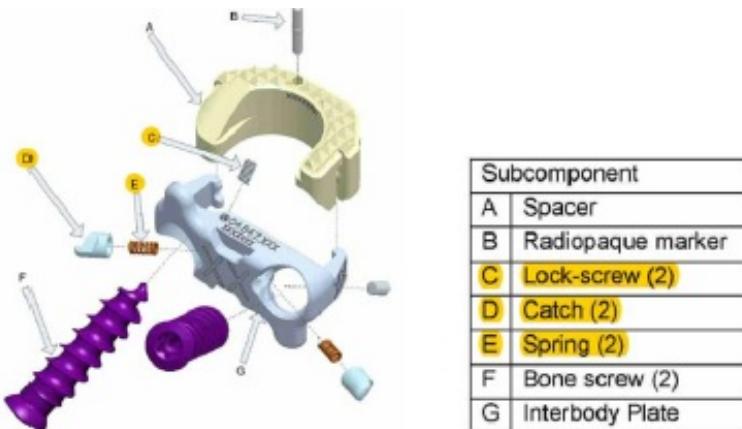
Dkt. No. 159-2 at 6–7. A surgeon attaches the Vectra to the surface of a vertebrae of the cervical spine. The Vectra designs cover two intervertebral disc spaces, as shown below.



Id. at 4.

The Zero-P VA is a member of the Zero-P family of products. Unlike the Vectra line, the Zero-P VA is a standalone intervertebral product to be used in the anterior cervical spine. The product is comprised of a spacer, a plate portion, and bone screws. The Zero-P VA includes a

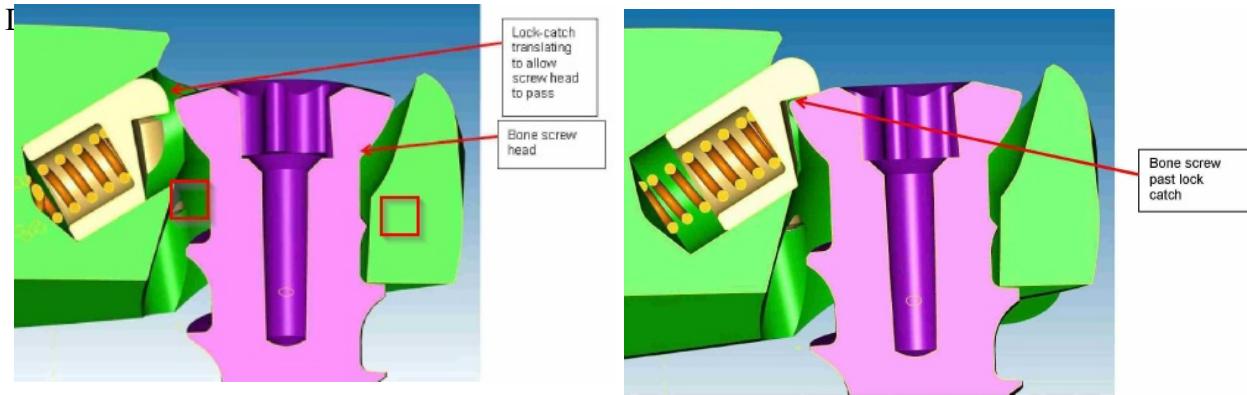
spring-loaded “snapper” mechanism designed to prevent screw back out. The snapper mechanism consists of a cylindrical catch (or pin), a spring, and a set screw.



Dkt. No. 159-9 at 24. During implantation, the surgeon inserts the spacer/plate portion of the Zero-P VA into an intervertebral disc space, rather than place the product on the surface of the anterior cervical spine. The Zero-P VA’s contralateral stops rest on the surface of the spine, as shown below.



Dkt. No. 159-3 at 2, 5. In the snapper mechanism’s resting state, the spring applies a force on the catch, which positions a portion of the catch in the path of the bone screw. As the bone screw is inserted into the plate, the screw hits the catch and pushes it further into the plate portion, compressing the spring. After the screw passes the protruding portion of the catch, the spring pushes the catch outward into its original position. The catch prevents the screw from backing out of the bone.



Dkt. No. 159-9 at 33, 35.

ANALYSIS

I. Defendants’ Rule 50(b) Renewed Motion for Judgment as a Matter of Law

The court will first address Defendants’ motion for judgment as a matter of law pursuant to Rule 50(b) and to amend the judgment under Rule 59(e). Rule 50 “allows a district court to enter judgment against a party who has been fully heard on an issue during a jury trial if ‘a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.’” *Passananti v. Cook Cty.*, 689 F.3d 655, 659 (7th Cir. 2012) (citation omitted). The court is to decide “whether a highly charitable assessment of the evidence supports the jury’s verdict or if, instead, the jury was irrational to reach its conclusion.” *Thorne v. Member Select Ins. Co.*, 882 F.3d 642, 644 (7th Cir. 2018) (internal quotation marks omitted). The court must view the evidence presented at trial in the light most favorable to the party that prevailed before the jury and draw all reasonable inferences in that party’s favor. *Martin v. Milwaukee Cty.*, 904 F.3d 544, 550 (7th Cir. 2018). The court may not weigh the evidence or make credibility determinations. *Martinez v. City of Chicago*, 900 F.3d 838, 844 (7th Cir. 2018). Although the court reviews the entire record, “it must disregard all evidence favorable to the moving party that the jury [was] not required to believe.” *Reeves v.*

Sanderson Plumbing Prods., Inc., 530 U.S. 133, 150–51 (2000); *Tart v. Ill. Power Co.*, 366 F.3d 461, 478 (7th Cir. 2004). Overturning a jury verdict is not something that courts do lightly. *Massey v. Blue Cross–Blue Shield of Ill.*, 226 F.3d 922, 925 (7th Cir. 2000). A jury verdict will be overturned only if “the moving party can show that no rational jury could have brought in a verdict against it.” *Hossack v. Floor Covering Assocs. of Joliet, Inc.*, 492 F.3d 853, 859 (7th Cir. 2007) (internal citations and quotation marks omitted).

Defendants raise a number of arguments in their renewed motion for judgment as a matter of law: (1) the Zero-P VA does not infringe; (2) the Vectra does not literally infringe and a finding of equivalence is barred as a matter of law; (3) the jury’s finding of willfulness should be vacated; (4) Acantha did not prove induced infringement; (5) Campbell is prior art to the ‘008 Patent; (6) the court should vacate or amend the damages award to account for non-infringement; and (7) the court should amend the judgment in favor of the six dismissed-claims defendants. The court will address each in turn.

A. Infringement

Defendants assert that they are entitled to judgment as a matter of law of no literal infringement with respect to the Zero-P VA and Vectra products. Defendants also argue, in the alternative, that a finding of equivalence is barred as a matter of law. Because the court finds insufficient evidence to support a finding that the Zero-P VA product infringed, but that substantial evidence supports a finding of literal infringement by the Vectra products, the court will not address Defendants’ equivalency arguments.

“To establish literal infringement, every limitation set forth in a claim must be found in an accused product, exactly.” *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed. Cir.

1995). “[T]he burden remains with the patentee to prove infringement, not on the defendant to disprove it.” *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1095 (Fed. Cir. 2008). Whether Defendants’ products meet all the claim limitations is a question of fact for the jury to decide. See *Akzo Nobel Coatings, Inc. v. Dow Chem. Co.*, 811 F.3d 1334, 1339 (Fed. Cir. 2016) (citing *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129–30 (Fed. Cir. 2011)). Judgment as a matter of law of no literal infringement is nevertheless “appropriate if no reasonable fact finder could determine that the accused devices meet every limitation of the properly construed claims.” *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1308 (Fed. Cir. 2002) (quoting *Elkay Mfg. v. EBCO Mfg.*, 192 F.3d 973, 980 (Fed. Cir. 1999)).

1. Zero-P VA

Defendants argue that Acantha did not present sufficient evidence at trial to support findings of literal infringement as to the Zero-P VA. First, Defendants contend that Acantha did not meet its burden of proof with respect to infringement because it failed to establish that the Zero-P VA has an “anterior” surface or a “posterior” surface required by the asserted claims. The ‘008 Patent involves an orthopedic implant assembly that has a stabilizing element with anterior and posterior surfaces. By way of example, Claim 59 reads in relevant part:

An orthopedic attachment assembly, comprising:

- a) an elongated securing element having an enlarged integral portion with a length, an anterior surface, a posterior surface and a transverse dimension;
- b) an attachment element which has an anterior surface and a posterior surface and which has at least one bore extending through the attachment element from the anterior surface to the posterior surface and is configured to receive the securing element, the bore having an anterior bore portion, and a posterior bore portion, the posterior bore portion having at least one transverse dimension smaller than the transverse dimension of the enlarged integral portion of the securing element to

facilitate retention of the enlarged integral portion of the securing member with the posterior bore portion; and

c) a biased stopping member which has a posterior stopping surface, a first configuration which extends within the bore that is elastically deformed to a second configuration as the enlarged portion of the securing member passes into the posterior bore portion, the biased stopping member returning to the first configuration upon passage of the enlarged integral portion into the posterior bore portion, the posterior surface of the biased stopping member configured to engage with the anterior surface of the enlarged integral portion of the securing member facilitating retention of the enlarged portion of the securing member within the posterior bore portion of the attachment member.

‘008 Patent col. 14 ll. 53–67, col. 15 ll. 1–13.

In its claim construction order, the court determined that the terms “anterior” and “posterior” have their plain and ordinary meanings, noting that the ‘008 Patent’s specification unequivocally reveals that “[t]he term posterior should be understood to mean an inner portion of the assembly closer to the bone to which the assembly is attached, and the term anterior should be understood to mean an outer portion of the assembly farther away from the bone.” *See* March 13, 2017 Decision and Order on Claim Construction (Claim Construction Order) at 5, Dkt. No. 64 (quoting ‘008 Patent col. 1 ll. 44–48). The court explained that “the patent’s use of the terms ‘anterior’ and ‘posterior’ in this context is relative, not spatially specific.” *Id.* Defendants seek judgment as a matter of law of non-infringement, asserting that no reasonable jury could have found that the Zero-P VA meets the limitations of “anterior surface” and “posterior surface” as construed by the court.

The court initially concluded during the summary judgment proceedings that the Zero-P VA did not infringe the ‘008 Patent. The court noted that, unlike the traditional anterior cervical plating systems, which are attached to the outer surface of the patient’s cervical spine by a surgeon, the Zero-P VA is embedded within the intervertebral disc space, or the space between the bone.

Defendants asserted that the Zero-P VA does not infringe the ‘008 Patent because the surfaces of the Zero-P VA products that would be defined as anterior or posterior are either equidistant to the bone or the anterior surface is closer to the bone. Acantha countered that the terms “anterior” and “posterior” merely identify the “front/back, leading/trailing, inward-/outward-facing surfaces of the claimed plate assembly.” Dkt. No. 213 at 17 (quoting Dkt. No. 159-11 at 41). Acantha suggested that the anterior/posterior limitations merely provide, from the surgeon’s perspective, an indication as to which surface is which, and “when a surgeon first orients the plate and approaches the spine for implantation, there can be no doubt which side is further away from the bone (the trailing side facing the surgeon) and which is closer to the bone (the leading side facing the spine).” *Id.* (quoting Dkt. No. 180 at 19). The court concluded that Acantha’s construction of “anterior” and “posterior” read “closer to/farther from the bone” out of the plain and ordinary meaning of these terms. It concluded that the operation of the Zero-P VA is significantly different than what is envisioned by the ‘008 Patent and found that, under the plain meanings of “anterior/posterior surface,” the Zero-P VA product does not infringe because the anterior surface of the product is at least equidistant (if not closer) to the bone, than its posterior surface.

On May 19, 2018, the court partially granted Acantha’s motion for reconsideration. Dkt. No. 253. Acantha claimed that the court erred in granting summary judgment with respect to the Zero-P VA because a person of ordinary skill in the art at the time of the invention would not understand “‘anterior surface’ or ‘posterior surface’ to have any bearing on the manner in which the attachment element is situated on the spine or between vertebra” but would rather understand “that the inventors were merely describing the surfaces of the attachment element in relation to the screw trajectory through a bore.” *Id.* at 8 (quoting Dkt. No. 224 at 14–15). The court agreed that the facts

were not clear at the time of the summary judgment proceedings and, in an abundance of caution, allowed the issue to proceed to trial. After the trial, the court now finds that its original conclusion that the Zero-P VA is a different device than the patented invention was correct.

Acantha identifies three categories of evidence supporting the jury verdict of literal infringement and establishing that the anterior/posterior surface limitations are met by the Zero-P VA product: the testimony of Dr. Sachs, Defendants' technical documents, and the models of the product. At trial, Dr. Sachs summarized the court's construction of the terms "anterior" and "posterior," *see Trial Transcript (Tr.) 484:19–23*, Dkt. No. 302 at 241, then described his application of the court's claim construction to the products at issue. Dr. Sachs testified:

The anterior surface of the plate is the surface that's closest to the surgeon and farthest away from where the screw will actually go into the bone. And the posterior surface is described as the lower surface of the plate, which is also the closest area to the bone where the screw will then enter the bone.

Tr. 483:14–19, Dkt. No. 302 at 240. Dr. Sachs explained that, with respect to the Zero-P VA, the screw goes into the opening on the plate's anterior surface and goes out of the opening on the posterior surface where it then enters the bone.

Defendants assert that the court should disregard Dr. Sachs' testimony because it was based on an improper understanding of the court's claim construction. Acantha claims that Dr. Sachs accepted the court's construction of the terms "anterior" and "posterior" and applied the terms in their relative, directional way, using the bore as the reference point. The court agrees with Defendants that Dr. Sachs' testimony was based on an erroneous interpretation of the court's claim construction and should be disregarded. Acantha maintains that how a person of ordinary skill in the art would understand "anterior" and "posterior" and whether the Zero-P VA had anterior and

posterior surfaces are questions of fact to be resolved by the jury. While an expert can offer an opinion on how a court's claim construction should be applied to the facts of the case, the expert cannot offer an opinion that contradicts or disregards the court's claim construction rulings. See *Ravo v. Covidien LP*, 55 F. Supp. 3d 766, 769 (W.D. Penn. 2014); *Cordis Corp. v. Boston Sci. Corp.*, 658 F.3d 1347 (Fed. Cir. 2011).

In this case, Dr. Sachs' opinion was based on an erroneous understanding of the court's claim construction. Under the court's construction, the Zero-P VA can infringe the '008 Patent only if it has an anterior surface that is farther from the bone and a posterior surface that is closer to the bone to which it is attached. The Zero-P VA employs an intervertebral plate as opposed to the traditional anterior cervical plate that the invention calls for and the Vectra has. When an intervertebral device such as the Zero-P VA is placed between vertebrae, the surfaces through which the bore runs are equidistant to the vertebrae. Rather than base his construction of the anterior/posterior surface limitations on the proximity of the surfaces to the bone as construed by the court, Dr. Sachs based his construction and analysis on screw trajectory and the surfaces' relationship to the point where the screw enters the bone. In accordance with this construction, Dr. Sachs described how the Zero-P VA has anterior and posterior surfaces, even though it sits between two vertebrae:

[I]f the disc was taken away this (indicating) becomes the surface of the bone where the screw goes in. So if a plate is sitting against that surface and the screw can pass through the plate into this (indicating), then that becomes the posterior surface of where the plate sits. And the anterior surface is farther away, which is where the screw would enter up in here.

Tr. 502:15–503:10, Dkt. No. 302 at 260. The anterior/posterior surface limitations have specific meanings, irrespective of screw trajectory, however. The patentee did not define anterior/posterior

by reference to the screw trajectory, and Acantha cannot escape the language actually used in the ‘008 Patent. *See Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009) (“When a patentee explicitly defines a claim term in the patent specification, the patentee’s definition controls.”); *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009) (“[C]laims cannot ‘enlarge what is patented beyond what the inventor has described as the invention.’” (quoting *Biogen, Inc. v. Berlex Labs., Inc.*, 318 F.3d 1132, 1140 (Fed. Cir. 2003))). Under Dr. Sachs’ construction, every plate with a hole through it will have a side where the screw enters and one where the screw exits. Dr. Sachs’ explanation of the anterior/posterior limitations effectively reads “closer to/farther from the bone” out of the plain and ordinary meaning of these phrases. In sum, the court will disregard Dr. Sachs’ testimony, as it is inconsistent with the court’s claim construction.

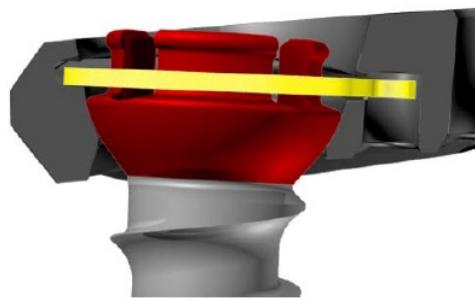
Without Dr. Sachs’ testimony regarding “anterior” and “posterior” limitations, there is little evidence to support the jury’s verdict that the Zero-P VA infringed the ‘008 Patent. “Substantial evidence, as required to support the jury’s verdict, demands more than a mere scintilla.” *Cordis Corp.*, 658 F.3d at 1358 (citing *Johnson v. Campbell*, 332 F.3d 199, 204 (3d Cir. 2003)). In short, no reasonable jury would have a legally sufficient evidentiary basis to find that the Zero-P VA meets the anterior/posterior surface limitations of the ‘008 Patent.

In addition, the snapper mechanism is significantly different than the biased stopping member that the patent calls for. The court construed “stopping member” to mean a “mechanical component that prevents the screw from backing out of the stabilizing member” and “bias” to mean the “tendency of a structure or component to return to a certain position or shape absent external force.” Claim Construction Order at 7, 13, Dkt. No. 64. The stopping member as described and

as reflected in the specification is a mechanical element that prevents the screw from backing out. The stopping mechanism in the Zero-P VA is a multi-part component that accomplishes the goal in a significantly different way. For these reasons, Defendants are entitled to judgment as a matter of law of no literal infringement as to the Zero-P VA.

2. Vectra

Defendants assert that they are entitled to judgment as a matter of law of no literal infringement with respect to the Vectra products because the Vectra does not have a screw head that is retained below the stopping member in the posterior bore portion, as required by all of the asserted claims of the ‘008 Patent. In particular, Defendants contend that the jury could not have reasonably found that the Vectra literally meets the limitations contained in the ‘008 Patent because the Vectra screw head extends throughout the bore and therefore cannot be retained below the stopping member in the posterior bore portion.



Defs.’ Br. at 33, Dkt. No. 317.

The court adopted the parties’ agreed construction of the term “head” to mean “portion of the securing member anterior to the elongated body.” Claim Construction Order at 4. Acantha argues that the head of the screw does not include the drive mechanism that guides the screw into the stabilizing member and sits above the stopping member. It maintains instead that the widest

portion of the screw is its head. In Acantha's view, because the drive mechanism is separate and distinct from the screw head, the screw head is retained in the posterior bore portion, thereby satisfying the parties' claim construction of the term "head" and meeting the claim limitations.

The jury had substantial evidence to determine that only the widest portion of the screw, without the drive mechanism, constitutes the "head." For instance, Dr. Sachs testified that, in his expert opinion, the spherical, widest portion of the screw is the "head" of the Vectra screw. Tr. at 489:16–490:16, Dkt. No. 302 at 246. Dr. Sachs' opinion was supported by Defendants' own documents, which confirmed that the driving mechanism was separate and distinct from the screw head. One document described the Vectra clip as covering both sides of the head. Although Defendants' expert, Mr. Sherman, testified that the head necessarily included the drive mechanism, it is the jury's "role to evaluate the weight to be given to the testimony of dueling qualified experts."

Uniloc USA, Inc. v Microsoft Corp., 632 F.3d 1292, 1306 (Fed. Cir. 2011) (citing *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 856 (Fed. Cir. 2010)). Based on a review of the record as a whole, the court cannot conclude that there was not substantial evidence to support the jury's finding of infringement. As a result, Defendants are not entitled to judgment as a matter of law of no literal infringement as to the Vectra products.

B. Willfulness

Defendants also challenge the jury's finding of willfulness as unsupported by substantial evidence. A party seeking a willfulness finding must prove by a preponderance of the evidence that "the risk of infringement was either known or so obvious that it should have been known" to the alleged infringer. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1930 (2016) (internal quotation marks and citation omitted). A determination of willfulness is a "highly fact-based

endeavor.” *Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, 240 F. Supp. 3d 605, 618 (E.D. Tex. 2017); *Sociedad Espanola De Electromedicina Y Calidad, S.A. v. Blue Ridge X-Ray Co., Inc.*, No. 1:10-cv-00159-MR, 2016 WL 3661784, at *2 (W.D.N.C. July 8, 2016) (explaining that the issue of willfulness is “solely a factual issue which can be readily addressed by a jury”). It turns, in particular, “on the subjective belief of the accused infringer, measured at the time of the challenged conduct.” *Velocity Patent LLC v. FCA US LLC*, 319 F. Supp. 3d 950, 971 (N.D. Ill. 2018) (citing *Halo*, 136 S. Ct. at 1933 (“The subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless.”)); *see also Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1370–72 (Fed. Cir. 2017) (noting that the subjective willfulness standard was not altered by *Halo*). The infringer’s knowledge of the asserted patent, without more, is insufficient to support a willfulness finding. *See Ajinomoto Co., Inc. v. Archer–Daniels–Midland Co.*, 228 F.3d 1338, 1351–52 (Fed. Cir. 2000). “The patentee must present threshold evidence of culpable behavior.” *Norian Corp. v. Stryker Corp.*, 363 F.3d 1321, 1332 (Fed. Cir. 2004). In support of its willfulness argument, Acantha maintains that Defendants’ reliance on the opinions of counsel was unreasonable and that Defendants copied the inventions covered by the ‘008 Patent. Viewing the record in the light most favorable to Acantha and giving Acantha the benefit of all reasonable inferences, the court concludes that Acantha provided sufficient evidence for a reasonable jury to have found Defendants’ infringement was willful.

Defendants maintain that Acantha failed to meet its burden of proving the opinions of counsel Defendants relied on were incompetent and failed to show that the opinions were so deficient that it was unreasonable to rely on them. Defendants assert that they reasonably relied on

two opinions from independent outside counsel to form a good-faith belief in non-infringement or invalidity of the ‘008 Patent. The opinion letters comprise approximately seventy pages of analysis and opinion and conclude that the accused products did not infringe a valid claim of the ‘008 Patent. Acantha contends that the competency of these opinion letters is only relevant if Defendants reasonably relied on them, however, and that it presented evidence that Defendants did not rely on the letters.

Although Defendants’ witnesses testified that it was standard practice to obtain and rely on opinions of counsel before launching a product, none of Defendants’ witnesses who were employed in Defendants’ engineering or product development departments actually read the opinions or could testify to the contents of the opinions they claimed the company relied on. One can easily argue that the engineers and developers would not have read the opinion letters because they believed in-house counsel would review and analyze them. But Defendants did not present any evidence or testimony from their in-house counsel or other individuals who may have read the opinions. Based on the evidence presented at trial and the lack of testimony from an individual who actually read the letters, the jury could have reasonably concluded that Defendants did not reasonably rely on those opinions or that the letters were merely intended to perform the function of insulating Defendants from liability rather than ensure that Defendants acted lawfully. This is a sufficient basis for the jury to find willfulness.

Acantha also submitted sufficient evidence that Defendants copied Acantha’s patent, Stryker’s licensed Reflex product, or both. The record contains evidence that David Talaber, one of the inventors of the ‘008 Patent, first informed Defendants of Acantha’s patent via letter in March 2002, over three years before the release of the Vectra product. The letter was sent to Nisra

Thongpreda, who worked with Lan Ahn Duong and Sean Suh on the ACCS product, the predecessor to the Vectra product. The evidence revealed that weeks after Talaber sent the letter to Thongpreda, Duong and the development team began developing a design that was similar to the preferred embodiment in Acantha's patent. In addition, Stryker, the licensee of the '008 Patent, was one of Defendants' primary competitors, and Defendants' engineers knew about the Stryker Reflex, the licensed product, during the development of the ACCS and Vectra. In fact, Vectra was designed to "go head to head with . . . Stryker's Reflex Hybrid . . . to reclaim the leadership position in [anterior plating]." Pl.'s Br. at 16, Dkt. No. 313 (quoting PX359-3). Acantha also argues that the Zero-P VA originated from and was inspired by the copycat Vectra. Defendants contend that Duong and their other developers independently developed the design for the screw back-out prevention mechanism in the products at issue. While Duong gave a plausible explanation of independent conception and development, the jury was not required to accept this testimony.

Though the evidence presented by Acantha is circumstantial, it is sufficient to support the jury's verdict. Construing the evidence in the light most favorable to Acantha, which the court must do at this stage, Defendants were aware of and had access to Acantha's patent and the Stryker Reflex and shortly thereafter developed a very similar product. Acantha has therefore presented sufficient evidence of copying. This evidence also supports the jury's willfulness finding. Although Acantha's evidence of willfulness is not overwhelming, the court will not overturn the jury's finding of willfulness.

C. Induced Infringement

Defendants assert that no reasonable jury could have found induced infringement because Acantha did not present evidence to show that Defendants induced others to directly infringe the

‘008 Patent. To establish induced infringement, a patentee must prove by a preponderance of the evidence that “(1) there was underlying direct infringement; and (2) the accused infringer knowingly induced infringement and possessed specific intent to encourage another’s infringement.” *Barry v. Medtronic, Inc.*, 230 F. Supp. 3d 630, 640 (E.D. Tex. 2017) (citing *Limelight Networks, Inc. v. Akamai Techs., Inc.*, 134 S. Ct. 2111, 2117 (2014)). Defendants assert that the mere fact that they sell the products and publish surgical guides is insufficient to prove that Defendants specifically intended anyone to infringe the ‘008 Patent. But circumstantial evidence of inducement is sufficient, and the “requisite intent to induce infringement may be inferred from all of the circumstances.” *Warsaw Orthopedic, Inc. v. NuVasive, Inc.*, 824 F.3d 1344, 1347 (Fed. Cir. 2016) (quoting *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 699 (Fed. Cir. 2008)). Based on the evidence presented at trial, the jury could have inferred that Defendants had knowledge of their customers’ infringement of the ‘008 Patent. The surgical technique guides are in fact evidence of inducement, as they instruct surgeons how to use Defendants’ infringing products. The jury also heard evidence that Defendants sell specially-designed instruments to use with their products and supply the instruments to the surgeon at the time of the surgery. Tr. 657:9–17, Dkt. No. 303 at 44. The court concludes that substantial evidence supported the jury’s verdict of inducement.

D. Prior Art

Defendants also request that the court find as a matter of law that Campbell is prior art to the ‘008 Patent because the question is relevant to the issue of ensnarement. Because the court found that substantial evidence supported literal infringement and was not required to address Defendants’ ensnarement arguments, this issue is moot.

E. Amend Damages and Amend Judgment

Defendants request that the court vacate or amend the damage award to account for non-infringement. Because Defendants are entitled to judgment as a matter of law of no literal infringement as to the Zero-P VA, the court will amend the damage award to account for non-infringement of the Zero-P VA. In this case, there is no dispute as to the amount of the royalty base attributable to the Zero-P VA or the royalty rate to be applied. The judgment will therefore be amended to \$4,320,136.00 for infringement by the Vectra alone.

Defendants also request that the court alter or amend the judgment in favor of the dismissed-claims defendants, DePuy Synthes, Inc.; Synthes, Inc.; Synthes USA, LLC; DePuy Orthopaedics, Inc.; DePuy Spine, LLC; and Johnson & Johnson, Inc., and against Acantha on all of Acantha's claims. A judgment is not required, however, in cases where the parties stipulate under Federal Rule of Civil Procedure 41(a)(1)(A)(ii) to dismiss certain parties with prejudice. Accordingly, the court will not amend the judgment in favor of the six dismissed-claimed defendants.

II. Acantha's Rule 59 Motion

A. Enhanced Damages

Acantha requests an award of double damages pursuant to 35 U.S.C. § 284. Section 284 provides that “the court may increase the damages up to three times the amount found or assessed.” 35 U.S.C. § 284. The jury’s role in determining willfulness and the judge’s role in determining enhancement of damages are distinct. Indeed, the jury’s finding of willful infringement “does not mandate that damages be enhanced, much less mandate treble damages.” *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992). While the judge “cannot substitute his or her factual determination for a jury’s willfulness finding,” *Advanced Cardiovascular Systems, Inc. v.*

Medtronic, Inc., 265 F.3d 1294, 1310 (Fed. Cir. 2001), the district court has discretion to determine whether the defendant’s conduct is “sufficiently egregious to warrant enhanced damages.” *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1382 (Fed. Cir. 2017) (citing *Halo*, 136 S. Ct. at 1933). In guiding district courts in the exercise of this discretion, the Supreme Court recently explained in *Halo Electric, Inc. v. Pulse Electric, Inc.*, 136 S. Ct. 1923 (2016), that

[a]wards of enhanced damages under the Patent Act over the past 180 years establish that they are not to be meted out in a typical infringement case, but are instead designed as a “punitive” or “vindictive” sanction for egregious infringement behavior. The sort of conduct warranting enhanced damages has been variously described in our cases as willful, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate. District courts enjoy discretion in deciding whether to award enhanced damages, and in what amount. But through nearly two centuries of discretionary awards and review by appellate tribunals, the channel of discretion has narrowed so that such damages are generally reserved for egregious cases of culpable behavior.

Id. at 1932. The court must also account for “the particular circumstances of each case.” *Id.* at 1933. Enhanced damages are to be determined based on a preponderance of the evidence standard. *Id.* at 1934.

The Federal Circuit has articulated a non-exclusive list of factors that can assist a district court in evaluating the egregiousness of a defendant’s conduct. *See Read*, 970 F.2d at 826. Those factors are (1) whether Defendants deliberately copied the ideas or design of another; (2) whether Defendants, when they knew of the other’s patent protection, investigated the scope of the patent and formed a good faith belief that it was invalid or that it was not infringed; (3) Defendants’ behavior as a party to the litigation; (4) Defendants’ size and financial condition; (5) the closeness of the case; (6) the duration of Defendants’ misconduct; (7) the remedial action taken by Defendants; (8) Defendants’ motivation to harm; and (9) whether Defendants attempted to conceal

their misconduct. *Id.* at 827–28. Although the jury agreed with Acantha that Defendants willfully infringed, the court finds that, based on the *Read* factors and the totality of the circumstances, an award of enhanced damages is not appropriate in this case.

1. Defendants’ copying

The first *Read* factor is “whether the infringer deliberately copied the ideas or design” of the patentee. *Id.* at 827. While the jury was free to find that Defendants copied the ‘008 Patent, that evidence was not overwhelming, as substantial evidence regarding copying was presented on both sides. With respect to copying, Acantha presented evidence that Talaber sent a letter to Nisra Thongpreda, one of Defendants’ employees, regarding the ‘008 Patent in March 2002, three years before the release of the Vectra product. Acantha maintains that Duong and the development team began developing a design that was similar to the preferred embodiment in the patent just weeks after he sent the letter to Thongpreda, who had worked with Duong on the ACCS product. Yet Defendants argued that Defendants, Acantha, and other market competitors worked in a crowded field of visually and functionally similar products and that Duong and their other developers independently designed the screw back-out prevention mechanism in the Vectra. Defendants presented evidence that the patented back out prevention arrangement found in the Vectra products was initially developed for use in the ACCS, a device that is functionally indistinguishable from the Vectra but is not claimed to infringe the ‘008 Patent. Defendants also presented evidence that the inventors of the ACCS were unaware of the Acantha patent at the time they created the ACCS design. Based on the conflicting evidence of copying presented by the parties, this factor does not strongly favor enhancement of damages.

2. Defendants' investigation of the scope of the patent and formation of a good-faith belief that it was invalid and not infringed

The second factor assesses the extent of the infringer's efforts to determine whether the patent was valid and whether its product infringed upon it. Again, while the jury was free to find that Defendants lacked a good faith belief in the invalidity of the '008 Patent, Defendants presented evidence that they had a good-faith belief that the products at issue did not infringe the Acantha patent. In this case, Defendants assert that they made deliberate and considerable efforts to avoid infringement by relying on opinion letters from outside counsel. The Federal Circuit has "repeatedly recognized that advice of counsel is relevant to induced infringement and willfulness." *Omega Patents, LLC v. CalAmp Corp.*, 92 F.3d 1337, 1352 (Fed. Cir. 2019). "[A]n accused infringer's reliance on an opinion of counsel regarding noninfringement or invalidity of the asserted patent remains relevant to the infringer's state of mind post-*Halo*." *Id.* at 1353.

Defendants presented evidence that it was their practice to involve patent attorneys early in the product development process. David Gerber, Defendants' corporate representative, explained that Defendants take the product development process seriously as a company and that the process is exhaustive in order to prevent litigation regarding their products. Tr. 745:6–8, Dkt. No. 303 at 222. Chris Roth, a director in the research and development organization for DePuy Synthes who managed the company's cervical fusion group, also testified that Defendants obtain opinions from counsel to ensure that the design is unique and does not infringe anyone's patent. Tr. 974:15–16, Dkt. No. 304 at 197. He noted that, if counsel identifies a potential conflict, developers steer clear of that conflict early on before the company invests time and resources in making a prototype. Tr.

974:1–4. Roth explained that, in general, opinions from outside counsel are submitted to in-house counsel, who review the opinions. Tr. 976:4–9, Dkt. No. 304 at 199.

With respect to the development of the Vectra, Roth testified that Defendants obtained an outside infringement opinion, which was completed by Jones Day on October 25, 2006. He explained that, although he did not review the opinion himself, he received a March 21, 2006 internal memo, prepared by in-house counsel, dated March 21, 2006, summarizing the clearance opinion for the Vectra. Tr. 977:5–23, Dkt. No. 304 at 200. The memo, entitled “Noninfringement Opinion For Proposed Vectra Plate System,” states that, based on the October 25, 2006 infringement opinion and discussions held with product development as to any risks, “product development can proceed with the development and sale of the device method as it was disclosed for the formation of this noninfringement opinion.” *See* DTX1242. Defendants also obtained opinions of counsel for the development of the ACCS, which was completed on July 11, 2003, and the Zero-P VA, which was completed on August 25, 2010. *See* DTX1048, DTX1019, DTX1020. Though the jury did not credit Defendants’ argument that they had a good-faith belief that the ‘008 Patent was invalid and not infringed, it can nevertheless be inferred that Defendants had a good-faith belief that the patent was invalid. In short, the court finds that this factor does not strongly favor enhancement of damages.

3. Defendants’ behavior as a party to the litigation

The third factor examines the infringer’s behavior during the litigation. Having reviewed Acantha’s accusations of misconduct, the court is not convinced that Defendants engaged in litigation misconduct, such as “bringing vexatious or unjustified suits, discovery abuses, failure to obey orders of the court, or acts that unnecessarily prolong litigation.” *i4i Ltd. P’ship*, 598 F.3d at

859. Acantha asserts that when Dr. Lloyd contacted a DePuy Synthes employee in 2014 to discuss a possible licensing agreement, that employee told Dr. Lloyd that Defendants “would invalidate [Acantha’s] patent and that they would bankrupt [the] company.” Tr. 377:3–9, Dkt. No. 302 at 134. While Acantha asserts that this incident is indicative of Defendants’ litigation misconduct, the veiled threat is just as easily viewed as a statement reflective of costs associated with patent litigation and Defendants’ confidence in their position that their products did not infringe a valid patent.

As to Defendants’ litigation conduct, Defendants’ litigation strategy and zealous advocacy did not amount to vexatious litigation or gamesmanship, and their conduct did not constitute the kind of egregiousness that would justify enhancement. Accordingly, this factor does not strongly favor enhancement. *See Milwaukee Elec. Tool Corp. v. Snap-On Inc.*, 288 F. Supp. 3d 872, 902 (E.D. Wis. 2017) (“After reviewing the parties’ disagreements about each other’s litigation choices, the most it can say is that the case was hard-fought and involved no more than ordinary strategic decisions (and blunders) on both sides.”); *Barry v. Medtronic, Inc.*, 250 F. Supp. 3d 107, 117 (E.D. Tex. 2017) (“Enhancement analysis is not an opportunity for this court to penalize a zealous trial team that engaged in hard-fought battles but ultimately lost the war.”).

4. Defendants’ size and financial condition

The fourth factor requires that a court consider an infringer’s size and financial condition “relative to the plaintiff and also individually to ensure that enhanced damages would not unduly prejudice the defendant’s non-infringing business.” *Krippelz v. Ford Motor Co.*, 670 F. Supp. 2d 815, 822 (N.D. Ill. 2009). While this factor cannot, by itself, justify an award of enhanced damages, it is relevant to the consideration of enhanced damages. Defendants’ parent company is Johnson

& Johnson and Defendants have the ability to pay enhanced damages. Accordingly, this factor weighs in favor of enhanced damages.

5. Closeness of the case

The fifth factor, the closeness of the case, “examines whether the case involved a meaningful defense to the claims or whether it was easily decided against the infringer.” *Milwaukee Elec.*, 288 F. Supp. 3d at 903. This factor weighs against enhancement where both “parties advanced reasonable positions.” *Apple Inc. v. Samsung Elecs. Co., Ltd.*, 258 F. Supp. 3d 1013, 1033 (N.D. Cal. 2017) (citation omitted); *see also WesternGeco L.L.C. v. Ion Geophysical Corp.*, 837 F.3d 1358, 1363 (Fed. Cir. 2016) (“After *Halo*, the objective reasonableness of the accused infringer’s positions can still be relevant for the district court to consider when exercising its discretion.”). In this case, although the jury returned a verdict in favor of Acantha, Defendants’ defenses were not groundless or without merit. As Defendants note, the court originally granted summary judgment of non-infringement as to the Zero-P VA and no direct infringement as to both Vectra and Zero-P VA. And the court has now determined that the jury’s finding that the Zero-P VA infringed cannot stand. At the very least, this history bespeaks the closeness of the case. *See Sociedad Espanola*, 226 F. Supp. 3d at 532 (“[I]t would be difficult to conjure up a defense which would be more ‘reasonable’ than one expressly adopted by a federal judge.” (citation omitted)). Because both parties asserted reasonable positions on the various issues presented at trial, this factor weighs in favor of no enhancement.

6. Duration of Defendants’ misconduct

The sixth factor takes into account the duration of Defendants’ misconduct, or “the ‘duration of infringement’ when the defendant had knowledge of the patent.” *Canon, Inc. v. Color Imaging*,

Inc., 292 F. Supp. 3d 1357, 1366 (N.D. Ga. 2018) (quoting *I-Flow Corp. v. Apex Med. Techs., Inc.*, No. 07CV1200 DMS (NLS), 2010 WL 114005, at *3 (S.D. Cal. Jan. 6, 2010)). Acantha argues that the record shows that Defendants learned of the patent in 2002 before they designed their products. Defendants assert that they did not receive notice of the patent until 2014 based on Acantha’s failure to mark. Even accepting Defendants’ contention that Acantha failed to establish that Defendants had knowledge of the ‘008 Patent before they received notice on March 19, 2014, this factor would weigh in favor of enhancement, as Defendants continued to infringe after they had received notice and after Acantha filed suit, if the fact that Defendants were infringing were clear. *See Broadcom Corp. v. Qualcomm Inc.*, No. SACV 05-467-JVS(RNBx), 2007 WL 2326838, at *3 (C.D. Cal. Aug. 10, 2007) (“The length of [defendant’s] infringement (approximately two years), coupled with the fact that infringement continued after [plaintiff] filed suit, supports an increase in damages.”), vacated on other grounds, 2007 WL 8030058 (C.D. Cal. Nov. 21, 2007); see also *PPC Broadband, Inc. v. Corning Optical Commc’ns RF, LLC*, No. 511CV761, 2016 WL 6537977, at *8 (N.D.N.Y. Nov. 3, 2016) (“[C]ontinuing to sell the infringing products after notice of infringement and during the course of litigation supports enhancement.”). The length of time the infringement occurred is entitled to less weight, however, where the infringer has an arguable defense and no action for infringement is commenced until well after the allegedly infringing product has been on the market.

7. Remedial action taken by Defendants

The seventh factor considers whether the infringer took any remedial action to address its infringement. The “emphasis here is whether conduct during the pendency of the suit evinces an unrepentant defendant.” *Milwaukee Elec.*, 288 F. Supp. 3d at 904. Although Defendants were entitled to fight the case to its conclusion, Defendants have failed to take remedial action *after* the

jury's finding of infringement, such as seeking a licensing agreement or attempting to design around the patent, and have continued to sell the infringing products. *See Novozymes A/S v. Genencor Int'l Inc.*, 474 F. Supp. 2d 592, 611 (D. Del. 2007) ("That Defendants failed to take remedial action and continued to infringe until after the liability trial also supports an enhanced award."); *Arctic Cat Inc. v. Bombardier Recreational Prods., Inc.*, 194 F. Supp. 3d 1343, 1353 (S.D. Fla. 2016) (finding that Defendant had not engaged in remedial action because it did not approach Plaintiff about a license or attempt to design around the patents); *Stryker Corp. v. Zimmer, Inc.*, No. 1:10-CV-1223, 2017 WL 4286412, at *5 (W.D. Mich. July 12, 2017) (infringer continued to manufacture and sell products "even after the jury returned its verdict"). But again, this factor is entitled to less weight when Defendants continue in good faith to assert their defenses in motions after verdict and no final disposition has been reached.

8. Defendants' motivation to harm

The eighth factor assesses whether the "infringement was done with a 'pernicious' intent to harm" the patentee. *Milwaukee Elec.*, 288 F. Supp. 3d at 904 (quoting *Read*, 970 F.2d at 827). Acantha argues that Defendants were determined to sell products that would take business away from Stryker, Acantha's licensee. While Acantha argues that "motivation to compete is motivation to harm," Pl.'s Reply Br. at 18, Dkt. No. 327, a number of courts, including courts from this circuit, have found that economic motivations to infringe do not weigh in favor of or against enhancement. *See Milwaukee Elec.*, 288 F. Supp. 3d at 904 (noting that "Snap-On's conduct could be justified by market pressures"); *Georgetown Rail Equip. Co. v. Holland L.P.*, No. 6:13-CV-366, 2016 WL 3346084, at *20 (E.D. Tex. June 16, 2016), *aff'd* 867 F.3d 1229 (Fed. Cir. 2017) (finding this factor neutral because "there is nothing to suggest that Holland acted out of spite or ill-will toward

Georgetown or for any reason other than a desire to capture a piece of the market"); *Barry*, 250 F. Supp. 3d at 116–17 (finding this factor neutral where plaintiff presented "no evidence that Medtronic was motivated to infringe or continue infringing for any reason other than its own commercial business interest"); *Idenix Pharm. LLC v. Gilead Sci. Inc.*, 271 F. Supp. 3d 694, 702 (D. Del. 2017) ("There is no evidence of a 'motivation for harm' that would support enhancement. The record can only reasonably be understood as showing that Gilead's 'motivation'—in addition to a healthy profit motive, which Idenix (quite rightly) shares—was to develop a cure to a devastating, life-threatening disease."); *Spring Commc'n L.P. v. Time Warner Cable, Inc.*, No. 11-2686-JWL, 2017 WL 978107, at *14 (D. Kan. Mar. 14, 2017) ("[T]he fact that the infringer acted pursuant to a financial motive does not distinguish this case from the garden-variety infringement case."). Accordingly, this factor is neutral.

9. Whether Defendants attempted to conceal their misconduct

The final factor concerns whether the infringer sought to conceal its infringement, including pre-litigation cover-up or failure to disclose material information in discovery. Acantha concedes that Defendants did not conceal their operation of the Vectra and the Zero-P VA from it and that Defendants sold the product openly. Instead, Acantha asserts that Defendants failed to disclose certain information during discovery. While Acantha contends that Defendants' conduct hindered its ability to prove its case, the court is not convinced that Defendants attempted to conceal discovery. Any uncertainty in information provided by Defendants was the result of their witnesses' faulty memories and the time that had passed between Defendants receiving and maintaining certain documents and Acantha initiating the instant action. The court does not find that Defendants engaged in improper concealment. *See Milwaukee Elec.*, 288 F. Supp. 3d at 904 (noting that "this

factor is limited to instances of overt misconduct, which may not exist in every case”). In short, this factor does not support enhancement.

10. Summary

Given the totality of the circumstances, the court declines to enhance the jury’s compensatory damages award. Again, enhanced damages “are generally reserved for egregious cases of culpable behavior.” *Halo*, 136 S. Ct. at 1932; *see also Presidio*, 875 F.3d at 1382 (“Enhanced damages are generally only appropriate in egregious cases of misconduct.”). In determining whether enhanced damages are warranted, “the court’s assessment of the level of culpability must be high.” *Read*, 970 F.2d at 828. Even though the jury found that the infringement was willful, after considering the record in this case as a whole, the evidence does not establish that Defendants behaved as “wanton and malicious pirate[s]” deserving of punishment. *Seymour v. McCormick*, 57 U.S. 480, 488 (1853); *see also Barry*, 250 F. Supp. 3d at 117 (“The actions of both sides at times may have approached those of a privateer, but they did not sink to the level of a ‘pirate.’”). For these reasons, the court declines to enhance damages pursuant to § 284.

B. Attorneys’ Fees and Costs

Under 35 U.S.C. § 285, the district court may award reasonable attorneys’ fees to the prevailing party in “exceptional” cases. “[A]n ‘exceptional’ case is simply one that stands out from others with respect to the substantive strength of a party’s litigation position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.” *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756 (2014). Exceptional cases are, by definition, rare. *Id.* “District courts may determine whether a case is ‘exceptional’ in a case-by-case exercise of their discretion, considering the totality of the

circumstances.” *Id.* In assessing the totality of the circumstances, courts consider “frivolousness, motivation, objective unreasonableness (both in the factual and legal components of the case) and the need in particular circumstances to advance considerations of compensation and deterrence.” *Id.* at 1756 n.6 (quoting *Fogerty v. Fantasy, Inc.*, 510 U.S. 517, 534 n.19 (1994)). Acantha has the burden of showing entitlement to attorneys’ fees by a preponderance of the evidence. *Id.* at 1758.

After reviewing the totality of the circumstances in this case, the court declines to find that this case is “exceptional.” In support of its request for attorneys’ fees, Acantha argues that this case was not close and that Defendants engaged in litigation misconduct. The court does not agree that the case was not close. While some of Defendants’ defenses were ultimately unsuccessful, they were neither frivolous nor objectively unreasonable, and Defendants’ positions were not weak or without merit. In addition, the court declines to find that Defendants engaged in litigation misconduct. This was a hard fought patent litigation, and both sides presented their respective positions in good faith. In sum, this case does not stand out “from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.” *Id.* at 1756. Accordingly, Acantha’s motion for attorneys’ fees is denied.

Acantha also requests that the court award it costs. Pursuant to Rule 54(d) of the Federal Rules of Civil Procedure, costs “[s]hould be allowed to the prevailing party.” In the context of patent litigation, the Federal Circuit has found that a party “‘prevails’ when actual relief on the merits of [its] claim materially alters the legal relationship between the parties by modifying the defendant’s behavior in a way that directly benefits the plaintiff.” *Manildra Mill. Corp. v. Ogilvie Mills, Inc.*, 76 F.3d 1178, 1182 (Fed. Cir. 1996). Acantha prevailed on its claim that Defendants’

Vectra products infringe, but has not prevailed on its claim against the Zero-P VA. Under these circumstances, the court concludes that each party should bear their own costs.

C. Supplemental Damages

Acantha also seeks pre-verdict and post-verdict supplemental damages. “A patentee is entitled to damages for the entire period of infringement and should therefore be awarded supplemental damages for any periods of infringement not covered by the jury verdict.” *Mondis Tech. Ltd. v. Chimei InnoLux Corp.*, 822 F. Supp. 2d 639, 642 (E.D. Tex. 2011) (citation omitted). The court concludes that Acantha is entitled to pre-verdict supplemental damages for the period of April 1, 2018 through August 21, 2018 at a rate of 6.5%, the same rate awarded by the jury.

As to the royalty rate for sales occurring between August 22, 2018, through the date of judgment, “[t]he amount of supplemental damages following a jury verdict ‘is a matter committed to the sound discretion of the district court.’” *SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1384 (Fed. Cir. 2013) (quoting *Amado v. Microsoft Corp.*, 517 F.3d 1353, 1362 n.2 (Fed. Cir. 2008)). Although Acantha requests that the court use a 7.875% royalty rate for post-verdict supplemental damages, the court concludes that an increase in the royalty rate for post-verdict damages is not warranted here. Accordingly, the same royalty rate found by the jury will apply to the post-verdict supplemental damages award. In order to calculate supplemental damages, Defendants shall produce financial data showing their sales from April 1, 2018, through the date of judgment. The parties shall calculate a supplemental award within thirty days of the date of this order.

D. Ongoing Royalty

Acantha also seeks enhanced ongoing royalties pursuant to § 284. On July 8, 2019, the ‘008 Patent expired. As a result, Acantha’s request for an ongoing royalty through the expiration of the patent is now moot.

E. Prejudgment and Postjudgment Interest

Acantha also requests pre-judgment and post-judgment interest. Pursuant to 35 U.S.C. § 284, Acantha, as the prevailing party, is entitled to “damages adequate to compensate for the infringement . . . together with interest and costs as fixed by the court.” The Supreme Court has recognized that prejudgment interest “should ordinarily be awarded” unless some justification is provided to withhold such an award. *See Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 654 (1983). Acantha is also entitled to an award of post-judgment interest as the prevailing party. *See* 28 U.S.C. § 1961(a) (allowing post-judgment interest “on any money judgment in a civil case recovered in a district court”). Post-judgment interest is “calculated from the date of entry of the judgment, at a rate equal to the weekly average 1-year constant maturity Treasury yield, as published by the Board of Governors of the Federal Reserve System, for the calendar week preceding[] the date of the judgment.” *Id.*

Defendants concede that the prevailing party is entitled to interest on any affirmed judgment but assert that this determination is premature based on their intention to appeal. But Defendants cite no case law to support their position. Accordingly, the court will award Acantha pre-judgment interest at the prime rate, compounded quarterly as well as post-judgment interest on the total judgment.

CONCLUSION

For these reasons, Defendants' motion for judgment as a matter of law pursuant to Rule 50(b) and to amend the judgment pursuant to 59(e) (Dkt. No. 316) is **GRANTED-IN-PART** and **DENIED-IN-PART**. Defendant is entitled to judgment as a matter of law of no infringement as to the Zero-P VA and the amount of the judgment shall be reduced to \$4,320,136.00 for infringement by the Vectra alone. The motion is denied in all other respects. Acantha's Rule 59 motion for enhanced damages and other post-trial legal and equitable relief (Dkt. No. 318) is **GRANTED-IN-PART** and **DENIED-IN-PART**. Acantha is entitled to supplemental damages as well as pre-judgment and post-judgment interest, but its request for enhanced damages, attorneys' fees, and costs is denied and its request for an ongoing royalty calculation is denied as moot. Acantha's motion for leave to file a sur-reply (Dkt. No. 332) is **GRANTED**. Defendants shall produce financial data showing their sales from April 1, 2018 through the date of judgment. The parties shall calculate a supplemental award within thirty days of the date of this order. Once the court receives the parties' supplemental damages calculation, it will enter an amended judgment.

SO ORDERED this 5th day of August, 2019.

s/ William C. Griesbach
William C. Griesbach, Chief Judge
United States District Court